Filing Date: March 31, 2004

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Title: OFDM SYSTEM WITH PER SUBCARRIER PHASE ROTATION

# **REMARKS**

Applicant has reviewed and considered the Office Action mailed on <u>April 14, 2008</u> (hereinafter "the office action") and the references cited therein.

Claims 1, 3-4, 7-8, 15, 22, 26, and 29 are amended, claims 2, 11-13, and 21 are canceled, and claim 34 is added; as a result, claims 1, 3-10, 14-20, and 22-34 are now pending in this application.

## 35 USC § 103 Rejection of the Claims

Claims 1, 5-6, 8-13 and 26-33 were rejected under 35 USC § 103(a) as being unpatentable over *Okada et al.* (U.S. Publication No. 2002/0003773A1) in view of *Yoshida* (U.S. Patent No. 7,254,179 B2).

With regard to independent claim 1, the office action indicates that claim 2 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The subject matter of original claim 2 has been incorporated into independent claim 1 in the present response. Other minor changes have been made to the language of claim 1 to increase clarity.

Based on the foregoing, it is submitted that independent claim 1 is now in form for allowance. Reconsideration and allowance of claim 1 is therefore respectfully requested.

With regard to independent claim 8, the office action indicates that dependent claim 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Independent claim 8 has been amended herein to include subject matter that is substantially similar to the subject matter of dependent claim 7. That is, independent claim 8 has been amended to recite that "said first phase shift and said second phase shift differ by approximately 360/B degrees, where B represents an approximate coherence bandwidth of a corresponding channel." It is submitted that independent claim 8 should thus be allowable for similar reasons to claim 7 had claim 7 been rewritten in independent form to include all of the limitations of its base claim.

Based on the foregoing, it is submitted that independent claim 8 is now in form for allowance. Reconsideration and allowance of claim 8 is therefore respectfully requested.

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With regard to independent claim 26, the office action indicates that dependent claim 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Independent claim 26 has been amended herein to include all of the limitations of dependent claim 7 had claim 7 been rewritten in independent form to include all of the limitations of previous independent claim 1.

Based on the foregoing, it is submitted that independent claim 26 is now in form for allowance. Reconsideration and allowance of claim 26 is therefore respectfully requested.

With regard to independent claim 29, the office action indicates that dependent claim 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Independent claim 29 has been amended herein to include substantially similar subject matter to dependent claim 14 had claim 14 been rewritten in independent form to include all of the limitations of previous independent claim 8.

Based on the foregoing, it is submitted that independent claim 29 is now in form for allowance. Reconsideration and allowance of claim 29 is therefore respectfully requested.

Claims 5-6, claims 9-10, claims 27-28, and claims 30-33 are dependent claims that depend either directly or indirectly from independent claims 1, 8, 26, and 29, respectively. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims.

Claims 11-13 have been canceled without prejudice.

Claims 15-20 and 25 were rejected under 35 USC § 103(a) as being unpatentable over Menon et al. (U.S. Patent No. 6,940,917 B2).

With regard to independent claim 15, the office action indicates that dependent claim 21 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Independent claim 15 has been amended herein to include all of the limitations of previous dependent claim 21.

Based on the foregoing, it is submitted that independent claim 15 is now in form for allowance. Reconsideration and allowance of claim 15 is therefore respectfully requested.

Claims 16-20 and 25 are dependent claims that depend either directly or indirectly from independent claims 15. Consequently, these claims are allowable for at least the same reasons as their corresponding base claims. These claims also provide further bases for patentability.

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### Allowable Subject Matter

Claims 2-4, 7, 14 and 21-24 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### New Claim

New claim 34 has been added. Claim 34 is a dependent claim that depends directly from independent claim 29. Consequently, this claim is allowable for at least the same reasons as base claim 29. This claim also provides further basis for patentability. For example, new claim 34 adds subject matter to claim 29 that is similar to the subject matter of dependent claim 7 that was identified as being allowable if rewritten in independent form.

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### Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (480-948-3745) to facilitate prosecution of this application.

Respectfully submitted,

JOHN S. SADOWSKY ET AL.

By their Representatives,

**CUSTOMER NUMBER: 45643** 

480-948-3745

Date June 16, 2008

John C. Scott

Reg. No. 38,613

<u>CERTIFICATE UNDER 37 CFR 1.8:</u> The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 16th day of <u>June</u>, 2008.

Christine Hartness